# A good beginning: Sit-stand workstations in the primary school classroom

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Given the fact that behavior is for the largest part driven by the context that we live in, sitstand workstations in the classroom may invite and seduce children to be more active and reduce sedentary time at school. If sit-stand workstations...

**Ethische beoordeling** Positief advies **Status** Werving gestopt

Type aandoening -

Onderzoekstype Interventie onderzoek

# Samenvatting

#### ID

NL-OMON23559

#### **Bron**

Nationaal Trial Register

#### **Verkorte titel**

A Good Beginning

#### **Aandoening**

Physical (in)activity, sedentary time, physical fitness, physiologic measures, cognitive skills, academic performance, sleep, stool, quality of life

# **Ondersteuning**

**Primaire sponsor:** Leyden Academy on Vitality and Ageing

Overige ondersteuning: Leiden municipality (gemeente Leiden; monetary)

Leyden Academy on Vitality and Ageing (in kind)

Lorentzschool Leiden (in kind)

Universiteit Leiden, Faculteit der Sociale Wetenschappen, Sectie Psychologie (in kind)

Presikhaaf Schoolmeubelen (material)

# Onderzoeksproduct en/of interventie

#### **Uitkomstmaten**

#### **Primaire uitkomstmaten**

Time of physical (in)activity during a school week as measured with the Activ8 activity tracker (time spent lying, sitting, standing, walking, running, cycling, playing, etc).<br/>
Academic achievements following a regular Dutch system (leerlingvolgsysteem, CITO)

# **Toelichting onderzoek**

#### Achtergrond van het onderzoek

Recent studies indicate that stand-biased classroom furniture leads to a reduction in sedentary time, an increase in physical activity, and, hence a an increase in energy expenditure. Such furniture does not seem to result in adverse effects in classroom behaviour and learning. However, to date, all reported studies had durations shorter than a full academic year, and focused on only a small number of factors that are affected by physical (in)activity. Therefore, in this controlled study with a repeated measures design, primary school children with hand without stand-biased classroom furniture will be followed for three years. That is, at an elementary school in Leiden, The Netherlands, one group (grade 5 in the Dutch system; 8-10 years old) will receive sit-stand workstations in their classroom. The teacher of this group will also receive a sit-stand workstation. The children in this group will be invited and motivated to reduce sedentary time. They will not be ordered or obligated to stand more than otherwise would happen. The effect of the sit-stand workstations (and the rolmodel the teacher will be) in reducing sedentary time will be investigated with a number of outcome measures related to physical (in)activity, academic achievement, physical fitness, physiological, cognitive, and psychological measures, sleep, stool, and satisfaction with the school environment. All outcomes will be compared between the intervention group (i.e., the group with sit-stand workstations; approximately 28 children) and a control group (i.e., a similar age group with regular workstations; approximately 28 children). Both groups will be followed for three years. At two time points each year, all outcomes will be measured.

#### Doel van het onderzoek

Given the fact that behavior is for the largest part driven by the context that we live in, sitstand workstations in the classroom may invite and seduce children to be more active and reduce sedentary time at school. If sit-stand workstations induce a more active lifestyle, longterm health benefits may also be expected. We hypothesize that a classroom furniture induced active lifestyle will result in benefits for physical fitness, fitness-related variables, cognitive and academic performance, sleep, stool, and quality of life in primary school children.

#### **Onderzoeksopzet**

May 2017

July 2017

January 2018

July 2018

January 2019

July 2019

#### Onderzoeksproduct en/of interventie

The children in the intervention group (approximately 28; 8-10 years old) will receive sitstand workstations in their classroom. They will keep these for three years. Their teacher will also receive a sit-stand workstation. The children are invited and motivated to reduce sedentary time at school. They are not ordered or obligated to stand more than would normally happen in classrooms without sit-stand workstations.

The children in the control group (approximately 28; 8-10 years old) will use regular (sit) workstations and receive regular treatment.

# Contactpersonen

#### **Publiek**

Leyden Academy on Vitality and Ageing

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# Wetenschappelijk

Leyden Academy on Vitality and Ageing

Lex van Delden Rijnsburgerweg 10

Leiden 2333 AA The Netherlands

# **Deelname** eisen

# Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- -Children who are following primary education at a selected school and who are in grade 5 in the Dutch system.
- -Children with a signed informed consent form to participate in this study.
- -Children who are physically able to stand.

# Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- -Children not following primary education at the selected primary school.
- -Children who are not able to stand during the intervention periode, due to health issues or serious injuries.

# **Onderzoeksopzet**

### **Opzet**

Type: Interventie onderzoek

Onderzoeksmodel: Parallel

Toewijzing: Gerandomiseerd

Blindering: Enkelblind

Controle: Geneesmiddel

#### **Deelname**

Nederland

Status: Werving gestopt

(Verwachte) startdatum: 01-05-2017

Aantal proefpersonen: 56

Type: Werkelijke startdatum

#### Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

#### Wordt de data na het onderzoek gedeeld: Ja

#### **Toelichting**

The collected data that will be analyzed in the current study, will be available from the corresponding author on reasonable request; for example for the purpose of a review and meta-analysis.

# **Ethische beoordeling**

Positief advies

Datum: 24-11-2016

Soort: Eerste indiening

# **Registraties**

# Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 45326

Bron: ToetsingOnline

Titel:

# Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

### In overige registers

Register ID

NTR-new NL6166 NTR-old NTR6313

CCMO NL60159.000.17
OMON NL-OMON45326

# Resultaten

# Samenvatting resultaten

As of yet, no publications based on this trial.